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Reel # 461  
Razumov, M.O.

RAZUMOV, M. O.

RAZUMOV, M. O. The economic and cultural growth of Eastern Siberia.  
Moskva, Vostochnosibirskoe kraevoe otdelenie, 1935. 155 p.

Cyr. 4 HC49

RAZUMOV, N.

Specialization is an important condition for the economy of  
communal labor. Sots. trud 8 no.7:71-78 J1 '63. (MIRA 16:10)

1. Nachal'nik Tekhnicheskogo upravleniya Moskovskogo gorodskogo  
soveta narodnogo khozyaystva.

RAZUMOV, N.

Several problems of improvement in the management of industrial enterprises. Vop. ekon. no.10:14-24 0 '60.

(MIRA 13:9)

(Industrial management)

RAZUMOV, N., inzhener.

Eleven hundred ton capacity mass produced diesel engine vessels.  
Mer. flot. 7 no.4:15-20 Ap '47. (MLRA 9:6)  
(Shipbuilding--Contracts and specifications)

RAZUMOV, N.

On the condition and rights of an industrial enterprise. Vop.  
ekon. no.7:126-132 J1 '63. (MIRA 16:8)  
(Russia--Industries)

RAZUMOV, N.

The over-all mechanization and automation of production. Vop. ekon.  
no.7:12-24 J1 '59. (MIRA 12:11)  
(Moscow--Machine industry) (Automation)



RAZUMOV, N.A., ingh.

Computing equipment used in the management of machinery plants;  
based on materials of the foreign press. Vest. mashinost. 43  
no. 6:72-76 Je '63. (MIRA 16:7)

(Machinery industry—Management)  
(Electronic computers)

RAZUMOV, Nikolay Alekseyevich; POGODIN-ALMSEYEV, G.I., prof., doktor tekhn.nauk, red.; KOKOSHKO, A.G., red.; NAUMOV, K.M., tekhn.red.

[Over-all mechanization and automation of production processes and labor productivity; practice of the Moscow City Economic Council] Kompleksnaya mekhanizatsiya i avtomatizatsiya proizvodstvennykh protsessov i proizvoditel'nost' truda; opyt Moskovskogo gorodskogo sovnarkhoza. Pod obshchei red. G.I. Pogodina-Alekseeva. Moskva, Izd-vo VPSH i AON pri TsK KPSS, 1960. 54 p. (MIRA 14:2)  
(Moscow--Automation) (Moscow--Technological innovations)  
(Labor productivity)

VOSKRESNISKIY, B.V.; MANILOVSKIY, R.G.; RAZUMOV, N.A., inzh.,  
retsensent; LYUBOVICH, Yu.O., kand. ekon. nauk, red.

[Production capacity of a machinery plant] Proizvodstven-  
naia moshchnost' mashinostroitel'nogo zavoda. Moskva, Izd-  
vo "Mashinostroenie," 1964. 271 p. (MIRA 17:7)

RAZUMOV, N.A.

Quality, reliability and durability of machinery industry  
production. Standartizatsiia 28 no.5:44-46 My '64. (MIRA 17:12)

L 4107-66 EWT(d)/EWP(c)/EWP(v)/T/EWP(k)/EWP(h)/EWP(l)/FBA/ETC(m) WW/JT

ACC NR: AP5021494

SOURCE CODE: UR/0118/65/000/008/0013/0018

AUTHOR: Razumov, N. A. (Candidate of economic sciences, Head); Mezhlumyan, S. G. 30  
(Engineer, Aspirant) 25  
B

ORG: [Razumov] Technical Bureau, Mosgorsovnarkhoz (Tekhnicheskoye upravleniye  
Mosgorsovnarkhoza; [Mezhlumyan] Academy of Social Sciences, TSK KPSS (Akademiya  
obshchestvennykh nauk TSK KPSS)

TITLE: Mechanization of Soviet industry 14

SOURCE: Mekhanizatsiya i avtomatizatsiya proizvodstva, no. 8, 1965, 13-18

TOPIC TAGS: industrial production, industrial management, industrial organization,  
industrial automation, production engineering, labor employment, labor policy,  
working condition

ABSTRACT: The 1966-70 plan for industrial expansion anticipates overall mechani-  
zation of production processes with emphasis on the elimination of indirect  
heavy manual labor. According to the authors, these objectives are very  
appropriate for the industry of the city of Moscow, since they consider it to  
be the most advanced and best supplied with highly skilled personnel.

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ACC NR: AP5021494

Much labor is lost in assembling.<sup>14</sup> Specifically, the assembly of twelve transfer machines for turning and grinding races, manufactured by Moscow's machine tool plants for the First State Bearing Plant (1GPZ), accounted for 66% of the total cost of these machines. One-half of this figure constituted outlays for installing and setting up the equipment. Analysis showed that this high cost was attributed to low precision of machining and poor preparation of design drawings. This resulted in a large volume of manual fitting during assembly operations, thus lowering the quality and reliability of transfer machines.

As of 1 January 1965, 44% of all the workers<sup>14</sup> in industrial establishments of the Moscow Sovnarkhoz were performing manual labor. Nine percent of all the workers were performing heavy manual labor. This situation, according to the authors, was caused by the fact that throughout the whole of Soviet industry, the efforts to step up labor productivity were centered on direct production, involving direct labor, and very little attention was paid to problems of indirect labor, including managerial practices. This attitude brought about a widening gap between the high technological level of primary production processes and the large share of manual labor and imperfect organization of supporting operations. Such functions as loading and unloading, transportation, storage, and clean-up, which could easily be mechanized with simple, inex-

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ACC NR: AP5021494

pensive, and standard equipment, still employ about 70% of workers on manual tasks, too often involving hard labor (32% of indirect labor). Specifically, the outlays for modernizing and improving the productivity of the latter group amounted to 9% of the outlays for mechanization and automation of production processes, while the primary production group received 91% of the funds.

Mechanization of indirect labor was found by the authors to be not only the most practical way to increase labor productivity, but also the "shortest" and the least "costly." They have suggested that the best way to achieve it is through 1) mechanization of loading, unloading, storage, and other indirect labor functions, 2) automation of power units, and 3) centralization of repair and tool shops. Furthermore, the authors suggest that definite improvement could be made through wide introduction of modern methods of automatic inspection and quality control, and also through the introduction of statistical quality control. Among additional measures, they suggest strict observance of "technological discipline" in order to attain uniformity in the quality of goods produced.

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ACC NR: AP5021494

They question the validity of the decree by the State Committee on Co-ordination of Scientific Research, issued on 11 January 1965, stipulating that "all primary and supporting production processes..." and also "processes involving preparatory functions and production management" should be mechanized before 1971. The authors state that "there are neither the means nor time, nor engineering resources to realize a goal of such scope by 1970. We are astounded by the repetition of such cliches even now, when there are only five years left to accomplish the program set forth by the Party...."

[ATD PRESS: 4121-F]

SUB CODE: GO, IE / SUBM DATE: none

BVK

Card 4/4



RAZUMOV, N.A.

Approaching the best world standards. Standartizatsia 29  
no.8:28-31 '65. (MIRA 18:10)

1. Nachal'nik tekhnicheskogo upravleniya Soveta narodnogo  
khozyaystva Moskovskogo gorodskogo ekonomicheskogo rayona.

... B.A., kand. ekonomicheskikh nauk

System of work for increasing production quality. Vest. mashinostr.  
45 no.6:74-77 Ja '65. (MIRA 18:6)

ELUMOV, N.A.

Standards form the base for high production standards and  
specialization in industry. Standartizatsiia 28 no.3:  
3-8 Mr'64. (MIFA 17:5)

1. Nachal'nik Tekhnicheskogo upravleniya Moskovskogo gorodskogo  
soveta narodnogo khozyaystva.

BORISOV, B.A., red.; RAZUMOV, N.A., red.; KOMAROV, Ye.I., red.; GERASI-MOVA, Ye.S., tekhn.red.

[Organization of industrial management and planning; practice of the Moscow City Economic Council] Organizatsiia upravleniia i planirovaniia promyshlennosti; opyt Moskovskogo gorodskogo sovnarkhoza. Moskva, Gosplanizdat, 1960. 273 p. (MIRA 13:7)  
(Moscow--Industrial management)

25(1,5)

PHASE I BOOK EXPLOITATION

SOV/2367

Moscow. Vysshaya partiynaya shkola. Kafedra promyshlennogo  
proizvodstva i stroitel'stva

Dostizheniya nauki i tekhniki i peredovoy opyt v promyshlennosti  
i stroitel'stve. vyp. 4: Tekhnologiya mashinostroyeniya  
/Obrabotka metallov rezaniyem/ (Achievements in Science and  
Technology and Advanced Practices in Industry and Civil Engin-  
eering. Nr 4: Machine-building Technology /Metal Cutting/)  
Moscow, Izd-vo VPSH i AON pri TsK KPSS, 1959. 189 p. 20,000  
copies printed.

Ed. (Title page): G.I. Pogodin-Alekseyev, Doctor of Technical  
Sciences, Professor; Eds. (Inside book): A.G. Kokoshko and  
R.D. Beyzel'man; Tech. Ed.: K.M. Naumov.

PURPOSE: This collection of papers is intended for engineers,  
technicians, and students associated with metal cutting.

COVERAGE: This collection of papers deals with; scientific achieve-  
ments and progressive methods in metal cutting; improvements in  
the technology of machinery construction; technical progress  
Card 1/4

Achievements in Science (Cont.)

SOV/2367

in machine-tool and instrument construction; and designs for the automation of metalworking machine tools and transfer machines. No personalities are mentioned. There are no references.

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Achievements in Science (Cont.)

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YEFIMOV, A.N., glav. red.; BACHURIN, A.V., red.; VOLODARSKIY, L.M., red.; GERSHBERG, S.R., red.; GILZBURG, S.Z., red.; DUNDUKOV, G.F., red.; KIRZHNER, D.M., red.; KLIMENKO, K.I., red.; KOMAROV, F.V., red.; KOROL'KOV, A.N., red.; KRYLOV, P.N., red.; LIVANSKAYA, F.V., red.; LOKSHIN, E.Yu., red.; OSTROVITIYANOV, K.V., red.; POSVYANSKIY, S.S., red.; PRUDENSKIY, G.A., red.; RAZUMOV, M.A., red.; RUMYANTSEV, A.F., red.; TATUR, S.K., red.; SHUKHAL'TER, L.Ya., red.; BAZAROVA, G.V., starshiy nauchnyy red., kand. ekon. nauk; KISEL'MAN, S.M., starshiy nauchnyy red.; GLAGOLEV, V.S., nauchnyy red.; TUMANOVA, N.L., nauchnyy red.; BLAGODARSKAYA, Ye.V., mlad. red.; SHUSTROVA, V.M., mladshiyy red.; GAYDUKOV, Yu.A., kand. ekon. nauk, red.; ZBARSKIY, M.I., red.; LOZOVY, Ya.D., red.; SERGEYEV, A.V., dots., red.; KHEYFETS, L.M., kand. tekhn. nauk, red.; LYUBOVICH, Yu.O., kand. ekon. nauk, red.; SYSOYEV, P.V., red.; KOSTI, S.D., tekhn. red.

[Economic encyclopedia; industry and construction] Ekonomicheskaya entsiklopediya; promyshlennost' i stroitel'stvo.  
Chleny red. kollegii: A.V.Bachurin i dr. Moskva, Gos.nauchn. izd-vo "Sovetskaya entsiklopediya." Vol.1. A - M. 1962.  
951 p. (MIRA 15:10)

(Russia--Industries--Dictionaries)  
(Construction industry--Dictionaries)

RAZUMOV, N.A.

Increasing the technical level, quality reliability and durability  
of the output of the machinery industry, Biul. tekhn.-ekon. inform.  
Gos. nauch.-issl. inst. nauch. i tekhn. i form. 18 no.3:7-8 Mr '65.  
(MIRA 18:5)

RAZUMOV, N.A., kand. ekonom. nauk; MEZHLUMYAN, S.G., aspirant

Evaluating the consumer quality of production according to organoleptic indices. Standartizatsiia 29 no.3:7-12 Mr '65.  
(MIRA 18:5)

1. Nachal'nik Tekhnicheskogo upravleniya Moskovskogo gorodskogo soveta narodnogo khozyaystva (for Razumov). 2. Akademiya obshchestvennykh nauk pri Tsentral'nom komitete Kommunisticheskoy partii Sovetskogo Soyuza (for Mezhlumyan).

RAZUMOV, N.A.

Organization of work on the over-all mechanization and automation  
of production processes in machinery manufacturing enterprises of  
the Moscow City Economic Council. Nauch.trudy MIEI no.18:52-90  
'61. (MIRA 15:2)

(Moscow--Machinery industry) (Automation)

RAZUMOV, N.A.

Standards and normals, basis for high-quality of production  
and specialization in industries. Ratsionalizatsiia 14 no.6:  
23-27 '64

1. Head, Technical Administration in the Moscow Municipal  
Council of National Economy.

RAZUMOV, N.A.

Standards and norms are important means for improving production  
quality and a basis for the specialization in industry. Izv.tekh.  
no.6:1-6 Je '64. (MIRA 17:12)

RAZUMOV, Nikolay Alekseyevich; GUROV, S., red.

[Technological progress and the economic efficiency of  
production] Tekhnicheskii progress i ekonomichnost' pro-  
izvodstva. Moskva, Mosk. rabochii, 1965. 125 p.

(MIRA 18:5)

1. Nachal'nik tekhnicheskogo upravleniya Soveta narodnogo  
khozyaystva Moskovskogo gorodskogo ekonomicheskogo rayona  
(for Razumov).

RAZUMOV, Nikolay Alekseyevich; SAVOSTIKOVA, Nina Vasil'yevna; S. IRNOV,  
Ye.I., red.; GERASIMOVA, Ye.S., tekhn. red.

[Analysis of carrying out the production program in assortment]  
Analiz vypolneniia proizvodstvennoi programmy po assortimentu.  
Moskva, Ekonomizdat, 1962. 76 p. (MIRA 15:9)  
(Moscow--Industrial management)  
(Moscow--Auditing and inspection)



RAZUMOV, N.A., inzh.

Improving production management in machinery plants in Moscow.  
Vest.mash. 41 no.8:82-85 Ag '61. (MIRA 14:8)  
(Moscow--Machinery industry--Management)

BALANDIN, Gennadiy Fedorovich; POGODIN-ALEKSEYEV, Georgiy Ivanovich, doktor  
tekhn. nauk; RAZUMOV, Nikolay Aleksandrovich; SHCHERBINA, Nikolay  
APPROVED FOR RELEASE: Tuesday, August 01, 2000  
Gavrilovich; SHCHERBINA, Nikolay Avksent'yevich; KOKOSHKO, A.G.,  
red.; NAUMOV, K.M., tekhn.red. CIA-RDP86-00513R001444

[Hot working of metals] Goriachaya obrabotka metallov. Moskva,  
Izv-vo VPSH i AON pri TsK KPSS, 1960. 148 p. (Dostizheniya nauki  
i tekhniki i peredovoi opyt v promyshlennosti i stroitel'stve,  
no.3). (MIRA 13:8)

(Metalwork)

RAZUMOV, N. I.

RAZUMOV, N. I. Zabaikal'e; svod materialov Komissii dlia izsledovaniia miestnago zemlevladieniia i zemlenol'-zovaniia, pod predsedatel'stvom Kulomzina. S-Peterburg, Izd. Kantseliarii komiteta ministrov, 1899. 373 p. DIC: Unclass. OST-H

60: IC, Soviet Geography, Part II, 1951/Unclassified

RAZUMOV, Nikolay Alekseyevich

Moscow Economic Council promotes technological development in  
the machinery industry. Dost.nauki i tekhn. i pered.op.v prom.i  
stroi. no.4:157-187 '59. (MIRA 12:10)  
(Moscow--Economic councils) (Moscow--Machinery industry)

RAZUMOV, Nikolay Alekseyevich; ISLANKINA, T.F., red.; SAVCHENKO, Ye.V.,  
tekh. red.

[Over-all mechanization and automation in the machinery industry;  
experience of Moscow enterprises] Kompleksnaia mekhanizatsiia i  
avtomatizatsiia v mashinostroenii; opyt moskovskikh predpriatii.  
Moskva, Izd-vo "Znanie," 1959. 30 p. (Vsesoiuznoe obshchestvo po  
rasprostraneniuiu politicheskikh i nauchnykh znani. Ser. 4, Nauka  
i tekhnika, no. 34) (MIRA 12:11)  
(Automation) (Moscow--Machinery industry)

RAZIMOV, N. M. nzh.

Determining the air exchange in buildings by graphic analysis.  
Vod. i san. tekhn. no.1285-12 D '63 (MIRA 18:2)

RAZUMOV, N.N., Inzh.

Calculating the infiltration of air into multistory buildings  
for any climatic conditions. Vod. i san. tekhn. no.1:23-29  
Ja 164 (MIRA 18:2)

KHVIYUZOV, Valentin Fedorovich; RAZUMOV, N.P., red.; MOSHAROVA, T.P.,  
red. izd-va; LAVRENOVA, N.B., tekhn. red.

[Underwater ship repairs] Podvodnyi sudoremont. Moskva, Izd-  
vo "Morskoi transport," 1961. 81 p. (MIRA 14:5)  
(Ships--Maintenance and repair)

USSR/Human and Animal Physiology - The Nervous System.

T

Abs Jour : Ref Zhur Biol., No 3, 1959, 13260  
Author : Razumov, N.P., Okhnyanskaya, I.G., Osipova, V.G.,  
Mel'nikova, M.M., Kozlov, L.A., Vakar, M.D.  
Inst : State Scientific Research Institute of Labor and  
Union Hygiene  
Title : Changes in the Higher Nervous Activity of Patients  
with Silicosis  
Orig Pub : Tr. Yubileyn. nauchn. sessii, posvyashch. 30-letney  
deyat-sti Gos. n.-i. in-ta gigiyeny truda i profzabo-  
levaniy. L., 1957, 215-221  
Abstract : An investigation of conditioned and unconditioned  
vascular and static reflexes and a determination of  
sensitivity of visual, auditory, cutaneous, gustatory,  
and olfactory analysors in patients with silicosis

Card 1/2

- 120 -

... of the stimulatory and inhibi-  
... of the illness. Pronounced disturbances of  
higher nervous activity were noted in the presence of  
undetermined changes in the ... which were unsatis-  
factory by ... examination for the diagnosis of  
silicosis. -- M.I. Lisina

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CIA-RDP86-00513R001

Card 2/2



RAZUMOV, N.T.

RAZUMOV, N.T., inzh.

Sharpening gang saws by means of porous abrasive wheels having a ceramic binder. Der. prom. 6 no.10:14 O '57. (MIRA 10:11)

1. Sibirskiy lesotekhnicheskiy institut.  
(Saws) (Abrasives)

RAZUMOV, N.T., inzhener.

Selection of grinding wheels and optimum speed of frame saw  
filing. Der. prom. 6 no.3:12-14 Mr '57. (MLRA 10:5)

1. Sibirskiy lesotekhnicheskii institut.  
(Saw filing) (Emery wheels)

*Paul*  
RAZUMOV, N. T.: *Master Tech Sci (lisa)* -- "Investigation of optimal conditions for sharpening framesaws". Leningrad, 1958. 11 pp (Min Higher Educ USSR, Leningrad Order of Lenin Forestry Engineering Acad in S. M. Kirov), 150 copies (KL, No 6, 1959, 150)

RAZUMOV, N. V.

The promoting action of mercury upon aluminum oxide in the dehydration of ethanol. V. M. Nikitin and N. V. Razumov. *J. Gen. Chem. (U. S. S. R.)* 11, 133-5 (1941).  
In prepn. of ethylene by dehydration of EtOH by poorly active  $Al_2O_3$ , an accidental introduction of Hg on the catalyst was found to have a strong promoting action. Further study showed that in the range of 380-420° at low space velocities of 30 and 60, the use of Hg-coated  $Al_2O_3$  (cont. low-activity alumina heated to 350° with metallic Hg) increased the yields by 25%. In a second series of expts., active alumina was prepd. by pptn. of  $Al(NO_3)_3$  by  $NH_4OH$ , washing, drying and baking at 300-50°, followed by treatment with Hg or Hg acetate in soln., followed by baking at 300-50°. In the range of 350-425° at space velocities of 60 to 2000, the activated catalyst also showed comparable increase in yields, being comparable with untreated catalyst at 370° and space velocity of 60, but with a 30% increased yield at space velocity of 2000. At 400° the latter value was 20% and at 425° it was 15%. The catalyst was found to retain only 0.5% Hg by wt., the excess distg. off on heating. The method of application of Hg to  $Al_2O_3$  is immaterial. G. M. K.

RAZUMOV, N. V.

Card. Tech. Sci.

Dissertation: "Chemical Nature of the Natural Inhibitors of Ekzhibi Petroleum."  
Central Inst. of Aviation Fuels and Oils--TsIAM, 9 Apr 47.

SC: Neftyanaya Materiya, Apr, 1947 (Project #17386)

PA 65T88

USSR/Petroleum Industry  
Petroleum - Cracking

May 1948

"Chemical Characteristics of Natural Inhibitors of  
Petroleum," N. V. Razumov, 6 pp

"Neft Khoz" Vol XXVI, No 5

Khabinskiy benzene is distinguished by its content  
of natural inhibitors which give it exceptionally high  
stability. Inhibitors are composed of complex mixture  
of monatomic phenols in which chemical analysis has  
established the presence of methylphenols and xylen-  
ols. Author has established that the formation of  
phenols in the cracking process is the result of

LC

65T88

USSR/Petroleum Industry (Contd)

May 1948

hydrolytic separation of the nonvolatile phenol esters  
contained in crude oil. Studies stabilizing action  
of petroleum phenols and their fractions on benzene.

RAZUMOV, N. V.

LC

65T88

*RAZUMOV, N.V.*

RAZUMOV, N.V.; SOLOV'YEV, A.V.

Genetic types of petroleum and conditions for the formation of  
petroleum deposits in the northeastern part of Sakhalin. Soob.  
Sakhal. kompl. nauch.-issl. inst. AN SSSR no. 5:61-71 '57.  
(Sakhalin--Petroleum geology) (MIRA 10:12)

SOLOV'YEV, A.V.; RAZUMOV, N.V.; ZHESTKOV, D.K.

Investigating natural oil seepage in the region of the village of  
Ay in Dolinsk District. Soob. Sakhal. kompl. nauch.-issl. inst.  
AN SSSR no.5:129-131 '57. (MIRA 10:12)  
(Dolinsk District--Petroleum)



RAZUMOV, N.V.; ZHESTKOV, D.K.

Rapid method for determination of nitrogen in petroleum and  
petroleum products. Izv. vost. fil. AN SSSR no.11:60-62 '57.  
(MIRA 11:1)

1. Sakhalinskiy kompleksnyy nauchno-issledovatel'skiy institut  
Akademii nauk SSSR.

(Nitrogen) (Petroleum--Analysis)

RAZUMOV, N. V.

Distr: 4E3d/4E4j

Influence of regional and vertical migration on the chemical composition of petroleum of some deposits in Sakhalin. A. V. Solov'ev and N. V. Razumov. *Geol. Nefti* 2, No. 1, 80-8 (1958). Analyses are presented in the form of graphs for samples from various deposits, for the sp. gr., resinous material, S, paraffin, % of fraction boiling to 300°, and to 500°, naphthenic and aromatic hydrocarbons, octane value (according to Soviet standards), and it can be seen that these values show a certain trend as one progresses along geographical latitude or longitude, depth, and rock formation.

Werner Jacobson

1/1

RE

PM

5  
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RAZUMOV, N.V.

Ratio of hydrocarbon groups in petroleum from the Pil'tun field.

Soob.Sakhal.kompl.nauch.-issl.inst.AN SSSR no.8:109-112 '59.

(MIRA 14:4)

(Sakhalin---Petroleum)

RAZUMOV, N.V.

Ratio of hydrocarbon groups in petroleum from the Bogachevka field  
in Kamchatka. Soob.Sakhal.kompl.nauch.-issl.inst.AN SSSR no.8:112-  
115 '59. (MIRA 14:4)

(Bogachevka Valley--Petroleum)

STASENKOV, V.V.; SIRYK, I.M.; RAZUMOV, N.V.

Oil and gas potentials of the western edge of the central Sakhalin  
synclinalorium. Geol.i geofiz. no.12:7-13 '61. (MIRA 15:5)

1. Sakhalinskiy kompleksnyy nauchno-issledovatel'skiy institut,  
g. Novo-Aleksandrovsk.

(Sakhalin--Petroleum geology)

(Sakhalin--Gas, Natural--Geology)

RAZUMOV, O.S., kand.tekhn.nauk

Accuracy of the position of points in small trilateration systems.  
Izv.vys. ucheb. zav.; geod. i aerof. no.6:7-14 '60. (MIRA 14:5)

1. Tul'skiy gornyy institut.  
(Triangulation)

ACC NR: AP6017064 (A) SOURCE CODE: UR/0154/65/000/005/0003/0011

AUTHOR: Razumov, O. S. (Docent, Candidate of technical sciences)

ORG: Tula Polytechnical Institute (Tul'skiy politekhnicheskiy institut)

TITLE: Accuracy of a method for determining projections and angles between points on the earth's surface in stellar (cosmic) triangulation

SOURCE: IVUZ. Geodeziya i aerofotos"yemka, no. 5, 1965, 3-11

TOPIC TAGS: triangulation, triangulation tracking, artificial satellite observation, astronomic geodesics

ABSTRACT: A formula for the mean square error is derived for a triangulation method based on using satellite observations to determine the direction of chords of the earth's ellipsoid. The method requires simultaneous measurement of the topocentric equatorial coordinates of the satellite at two different times from two points, assuming the coordinates of one of the points is known. It is also assumed that the length of one of the chords was found from geodesic measurements. The formula does not take into account any error in the synchronization of the simultaneous measurements. Orig. art. has: 1 figure, 29 formulas.

SUB CODE: 08.03/ SUBM DATE: 12May65/ ORIG REF: 002

UDC: 528.113.341

Card 1/1

RAZUMOV, O.S., aspirant

Evaluating the accuracy of position by the principles of statical  
mechanics of structures. Izv. vys. ucheb. zav.; geod. i aerof.  
no. 1:113-122 '58. (MIRA 11:7)

1. Moskovskiy institut inzhenerov geodezii, aerofotos"yemki i  
kartografii.

(Triangulation)



AUTHOR: Razumov, O. S., Graduate Student SOV/154-58.1-15/22

TITLE: Estimating the Accuracy of Point Position by Using the Principles of the Statics of Structures (Otsenka tochnosti polozheniya tochki metodami statiki inzhenernykh sooruzheniy)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Geodesiya i aerofotos"yemka, 1958, Nr 1, pp 113-120 (USSR)

ABSTRACT: The equations (4) and (5) are derived. From the point of view of the statics of structures, these are formulae for locating the center coordinates of a system of parallel forces independent of direction. On this basis a number of methods were developed for the adjustment of the figure of error by using the principles of theoretical mechanics. It is pointed out that, in determining the elements of the artillery dispersion error ellipse of shell explosions, the center of error is determined by the formulae (8) and (9). The Austrian scientist Tichy (Ref 5) and the two Soviet scientists V. N. Vysotskiy (Ref 1) and N. I. Tovstoles (Ref 4) worked on the problems of estimating the accuracy of geodesic surveys with consideration to the basic laws of statics. A few mistakes in the thesis of Tovstoles are pointed out. The ac-

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SOV/154-50-1 15/22

Estimating the Accuracy of Point Position by Using the Principles of the Statics of Structures

curacy of the point position is examined as obtained as the result of an approximated adjustment of surveying results. The error in position of any point situated within the figure of error consists of two amounts to be added: 1) of the mean quadratic ellipse of errors of the most probable point position and 2) of the directed distance connecting the respective point with the center of gravity of the point of the figure of error. The problem is now how to determine this accumulative error without looking for the center of gravity of the point of the figure of error, i.e. without another graphic adjustment of the surveys. Some laws of statical mechanics of structures are applied to the solution of this problem. The formulae (44), (45), (46) and (47) for the elements of the error ellipse are derived. There are 1 figure and 5 references, 4 of which are Soviet.

ASSOCIATION: Moskovskiy institut inzhenerov geodezii, aerofotos"yemki i kartografii

(Moscow Engineering Institute of Geodesy, Aerophotography and Cartography)

Card 2/2

ACC NR: AP6031604

(A)

SOURCE CODE: UR/0154/66/000/002/0049/0057

AUTHOR: Razumov, O. S. (Docent, Candidate of technical sciences)

ORG: Tula Polytechnical Institute (Tul'skiy polytekhnicheskiy institut)

TITLE: On construction of space polygonometry.

SOURCE: IVUZ. Geodeziya i aerofotos"yemka, no. 2, 1966, 49-57

TOPIC TAGS: geodesy, polygonometry, artificial satellite observation

ABSTRACT: Polygonometry in space as a means of intercontinental surveying is discussed. A polygon constructed on arcs on the terrestrial ellipsoid as its sides may be constructed by measuring the lengths of such arcs with the radio range finder. To orient this polygon in space, synchronous observations should be made on the artificial earth satellites by photographing these from both ends of each arc. Distances up to 1000 km can be measured now with the modern circular range finder with errors of  $\pm 3$  m and less than 1". The author derives a series of expressions describing the characteristics of such arcs and transforming the arcs on the theoretical ellipsoid to the corresponding arcs on the earth's surface. By photographing the satellites against the starlit sky, the topography-centered equatorial coordinates are obtained. Probable errors of calculation are analyzed by vector analysis and in practice may be easily calculated on computers. The polygon networks promise to be more reliable in that they

UDC: 528.338 : 629. 195

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ACC NR: AP6031604

are constructed of simpler figures--triangles and rectangles. Since the calculations do not depend on the position of the plumbline in space, they are simplified considerably. The method of polygonometry can also be used to advantage to measure the shape of the earth. Orig. art. has: 3 figures, 34 formulas.

SUB CODE: 08/      SUBM DATE: 12Apr65/      ORIG REF: 008/      OTH REF: 001

Card 2/2

RAYIKOV, G. S.: Master Tech Sci (diss) -- "Approximate methods of equilibrating /adjusting/ photometric measurements, and problems of evaluating precision". Moscow, 1958. 21 pp (Min Higher Educ USSR, Moscow Inst of Engineers of Geodesy, Aerial Photography, and Cartography) (Kl, No 13, 1959, 107)

RAZUMOV, O.S.

Weight of a balanced measuring result in the equivalent substitution  
method. Geod. i kart. no.12:18-21 D '63. (MIRA 17:1)

L 43206-65 EED-2/EEO-2/EEC(k)-2/ENT(d)/ENT(1)/FBD/FS(v)-3/T-2/EWA(d)/SEC(c)-2/  
FSS-2 Pg-l/Pk-l/Pl-l/Pn-l/Po-l/Pq-l/Pac-l/Pae-2 GW/WR  
ACCESSION NR: AP5007642 S/0154/64/000/006/0003/0015

AUTHOR: Razumov, O. S. (Docent, Candidate of technical sciences)

TITLE: The accuracy of some systems of cosmic triangulation

SOURCE: IVUZ. Geodeziya i aerofotos"yemka, no. 6, 1964, 3-15

TOPIC TAGS: cosmic triangulation, artificial earth satellite, satellite tracking,  
satellite observation station, cosmic polygonometry, geocentric coordinate

ABSTRACT: In a highly mathematical discussion, based primarily on the work of Bursa and Zhongolovich, of "cosmic triangulation" (a method of constructing a survey reference network on a global scale initiated in 1768 by Euler), the author deals with the accuracy of the polar method, the resection and linear section methods, and cosmic polygonometry. Likely sources of error in these methods are identified and expressions are derived to estimate the error in determining the geocentric coordinates of satellite observation sites, a key problem in setting up the global observation network of the future. The error is shown to depend primarily on the magnitude of the topocentric distance of an observation site; a more advanced measuring technique is expected to reduce the current error of 2-4" (taken

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L 43206-65

ACCESSION NR: AP5007642

by many scientists as optimum) involved in measurements at survey satellite distances of 1000-1500 km from the Earth's surface. Orig. art. has: 2 figures and 45 formulas.

ASSOCIATION: Tul'skiy politekhnicheskii institut (Tula Polytechnic Institute)

SUBMITTED: 04Aug64

ENCL: 00

SUB CODE: SV, MA

NO REF SOV: 004

OTHER: 003

Card 2/2 *mb*



ACCESSION NR: AP4039375

S/0154/63/000/006/0015/0033

AUTHOR: Razumov, O. S. (Docent, Candidate of technical sciences)

TITLE: About the possibilities of geodesic use of a stationary artificial earth satellite

SOURCE: IVUZ. Geodeziya i aerofotos"yemka, no. 6, 1963, 15-33

TOPIC TAGS: earth satellite, equatorial orbit, Kepler law, earth mapping, stationary orbit, navigation, communication satellite, spherical trigonometry, azimuth determination, orbit velocity

ABSTRACT: The author discussed the use of a stationary artificial earth satellite (ISZ) as a geodesic instrument. Emphasis was placed upon the presentation of the orbital characteristics of the ISZ. Initial considerations were that the ISZ should be in an equatorial orbit at a distance of 35 797 km from the earth's surface and should have an angular velocity of revolution equal to the earth's rotational velocity. A map is presented demonstrating the fact that one ISZ could serve almost all of Europe (zenith distance up to 75°). A coordinate system for referencing the ISZ was patterned after that developed by I. D. Zhongolovich (Sputniki Zemli i geodeziya. "Astronomicheskiy zhurnal, 1961, No. 1)

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ACCESSION NR: AP4039375

and by M. Burša (Možnosti využití a význam umělých družic Zeme pro geodezii, Geodetický a Kartografický obzor, 7-8, 1963). Coordinate derivations include an expression for the differential change in ISZ geodesic coordinates, plus a mean quadratic error expression. Further relationships are derived relating the parameters of an elliptical orbit, eccentricity, focal radius vector, parametric angle, etc., and also relationships of gravitational attraction, period of revolution, angular traverse, and radial velocities. Normal gravitational acceleration was calculated to be about  $22.421 \text{ cm/sec}^2$ , thus requiring a circular velocity of 3074 m/second to maintain orbiting speed. Additional calculations accounted for solar and lunar gravitation, as well as for the duration of solar illumination of the satellite (about 20+ hours) and the conversion of solar energy. The author recommended further study of the motion of the satellite to ensure data sufficiently accurate for geodesic purposes and further research into the possibility of orbital self-correction. Orig. art. has: 73 equations and 7 figures.

ASSOCIATION: Tul'skiy politekhnicheskii institut (Tula Polytechnic Institute)

SUBMITTED: 28May63

ENCL: 00

SUB CODE: ES,MA

NO REF SOV: 012

OTHER: 004

Card 2/2

RAZUMOV, O.S., dotsent

Graphic adjustment of minor systems of trilateration. Izv.vys.ucheb.  
zav.; gor.zhur. 7 no.2:51-57 '64. (MIRA 17:3)

1. Tul'skiy gornyy institut. Rekomendovana kafedroy geodezii i mark-  
sheyderskogo dela.

RAZUMOV, O.S.,

"Estimating the Accuracy of the Position of Points by Methods of Statical  
Mechanical of Engineer Structures," Izvestiya Vysshikh Uchebnykh Zavedeniy,  
Geodeziya i Kartografiya, No 1, Moskva, 1958. *p. 112*

GONCHAROV, A.V.; RAZUMOV, P.I.; GROMOVA, T.G., retsenzents; KOPELEVICH, Ye.I.,  
red.; DMITRIYEVA, N.I., tekhn.red.

[ISV-235 lapping machine] Lentosodinitel'naya mashina ISV-235.  
Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po legkoi promyshl.,  
1958. 47 p. (MIRA 11:4)  
(Textile machinery)

USTINOV, A.N., inzh.; RAZUMOV, P.I., inzh.; ZAYTSEV, D.P., inzh.

Attachment for the use of the UPOL-6 device in determining  
the wear of crankshaft journals and bearings. Vest.mashinostr.  
43 no.2:77-78 F '63. (MIRA 16:3)  
(Mechanical wear—Measurement)

SUBJECT : CULIVATED PLANTS. GRAIN.  
 REF. : REF ZHUR BIOL. 21, 1955, 1955-47  
 AUTHOR : Razumov, P.I.  
 INSTIT. : Kuybyshev Agricultural Inst.  
 TITLE : The Effect of Deep Plowing without a Moldboard on  
 the Yield of Corn Grown on an Occupied Fallow  
 JOURNAL : Izv. Kuybyshevsk. s.-kh. in-ta, 1957, 12, 37-42

SUMMARY : The soil which had been plowed without a moldboard  
 to a depth of 50 cm contained in the meter deep  
 layer during July more than 2.5% moisture, 1<sup>1</sup>/<sub>2</sub>-2  
 times as much nitrates, more than 10-50% more  
 active P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O than had occurred with ordin-  
 ary tilling. Winter rye which was sown after the  
 harvest of the corn raised for silage was less  
 troubled with weeds. The grainstuff yield was  
 increased by 31.5%.

PAGES: 1/1

RAZUMOV, P. I.

"Strip Fallow Under Winter Wheat in the Kuybyshevskaya Oblast." Cand Agr Sci, Saratov Agricultural Inst, Saratov, 1953. (RZhBiol, No 6, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No.521, 2 Jun 55



RAZUMOV, S.A.

Achromatic range and evolution of the light-perceiving apparatus of  
the retina. Probl.fiziol.ont. 12:197-206 '58 (MIRA 11:6)

1. Laboratoriya fiziologii analizatorov Leningradskogo gosudarstven-  
nogo universiteta. im. A.A. Zhdanova.

(COLOR SENSE)

(RETINA)

USSR/Human and Animal Physiology (Normal and Pathological).  
Sense Organs, Sight.

T

Abs Jour: Ref Zhur-Biol., No 17, 1958, 80064.

Author : Razumov, S.A.

Inst :

Title : On the Influence of Permanent Current on an Achromatic  
Diapason.

Orig Pub: Uch. zap. LGU, 1957, No 222, 205-211.

Abstract: After dark adaption in the course of 25 minutes, a  
10-minute dim light was used (neither luminosity  
nor exposure is indicated) which was changed with  
the length of time the person tested was in darkness,  
in the course of which there were determined (with  
the adapterchronaximeter of Makarov) through each

: 1/3'

USSR/Human and Animal Physiology (Normal and Pathological).  
Sense Organs. Sight.

T

Abs Jour: Ref Zhur-Biol., No 17, 1958, 80064.

6 minutes the adequate optical rheobase and the chronaxy of the color vision in the beginning with the influence of the electric current on the eye then during simultaneous 7-8 seconds, the influence on the eye and then investigated with a continuous current. The thresholds were measured to red ( $\lambda_{\text{max}} = 720 \text{ m}\mu$ ) and to green ( $\lambda_{\text{max}} = 520 \text{ m}\mu$ ) stimulations seen at an angle of  $20^\circ$ . A temporary influence on the eye of an electroton decreased the sensitivity to red and increased it to green. A temporary influence of the cathodic-electroton caused a reverse change. Similar influences were exerted by an- and anodic and cathodic-electroton on the achromatic thresholds of the color stimulators used, which is

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113

17(1)

SOV/30-59-4-36/51

1 AUTHOR: Razumov, S. A., Candidate of Biological Sciences

TITLE: Problems of Ecological Physiology (Problemy ekologicheskoy fiziologii)

PERIODICAL: Vestnik Akademii nauk SSSR, 1959, Nr 4, pp 121-123 (USSR)

ABSTRACT: The All-union Conference held by the Institut fiziologii im. I. P. Pavlova (Physiological Institute imeni I. P. Pavlov) in Leningrad between January 12th and January 17th dealt with these problems. Altogether 58 reports were delivered, e.g.: A. D. Slo-nim spoke about "Essential Trends of Research of the Ecological-physiological Specialization in Mammals"; D. A. Biryukov on "Ecological Factors in Animal Physiology"; I. D. Strel'nikov on "the Ecological Heat Balance in Several Invertebrates (Insects) and Vertebrates (Reptiles and Mammals)"; I. A. Arshavskiy spoke about "the Comparative Ontogenetic Characteristics of Several Physiological Features in Rabbits and Hares in Connection With Particularities of Their Ecology"; Ye. M. Kreps, N. A. Verzh-binskaya and A. A. Smirnov reported on "Physiological Charac-teristics of Various Hemocyanins of Species of Crabs in De-pendence of Their Conditions of Life"; Ye. I. Orlov spoke about

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SOV/30-59-4-36/51

Problems of Ecological Physiology

"the Behavior and Survival of "Iksodovyye kleshchi"(mites) in the Case of Irrigation and Flooding of the Irrigated Regions"; N. P. Naumov spoke about "the Internal Structure of Higher Vertebrates and Some Problems of Their Investigation by Ecological-physiological Methods"; I. Ya. Polyakov dealt with "the Morpho-physiological Variability of the Population of Rodents Under the Effect of Ecological Conditions"; N. I. Kalabukhov, N. A. Morkiyevich and E. A. Petrosyan spoke about "Several Ecological-physiological Characteristics of Various Species and Geographical Populations of a Type of Sandstone"; M. V. Kirzon, N. P. Naumov, N. M. Dukel'skaya and L. V. Borisov reported on "the Ecological and Physiological Trend of the Investigation of the Effect of Rat Poisons". In their resolution the members of the Conference underlined the great importance of ecological physiology and indicated the most important ways of further research in this field. Special attention was paid to the increased research work carried out by ecologists, zoologists, physiologists and biochemists.

Card 2/2

RAZUMOV, S.A.

Effect of a direct current on the motor activity of the heart. Uch. zap. LGU  
no.222:205-211 '57. (MIRA 10:2)

1. Laboratoriya analizatorov Fiziolozicheskogo Instituta Leningrad-  
skogo Gosudarstvennogo universiteta.  
(ELECTRICITY--PHYSIOLOGICAL RESEARCH) (MIRA)

RAZUMOV, S. A.

Fatigue and ways of combatting it. Izd. 2., perer. i dop. Leningrad. Madgiz (LeAingradskoe  
otd-nie) 1954. 71 p.

1. Fatigue.

GRUSHVITSKIY, I.V.; RAZUMOV, S.A.; MAKAROV, P.V., nauchnyy red.;  
VOROB'YEV, G.S., red.izd-va; GURDZHIYEVA, A.M., tekhn.red.

[Biology and religion] Biologiya i religiya. Leningrad, Ob-vo  
po rasprostraneniю polit. i nauchn.znanii RSFSR. Leningr.otd-nie,  
1960. 70 p. (MIRA 13:7)

1. Chlen-korrespondent AMN SSSR (for Makarov).  
(Biology) (Religion)



RAZUMOV, S.A.

[Fatigue and ways of preventing it] Utomlenie i bor'ba s nim. Izd.2.,  
perer. i dop.[Leningrad] Leningradskoe otdel., Medgiz, 1954.  
(Fatigue)

(MLRA 8:2)

RAZUMOV, S.A., Cand. Bio Sci--(diss) "Study of the chromatic  
change by the method of optical adequate chronaxymetry." Len, 1958.  
20 pp (Min of Education RSFSR. Len State Pedagog. Inst in A.I. Gertsen),  
100 copies (KL, 30-00, 125)

ATKIN, A. J.

Utemlenie i bor'ba s nim. [Fatigue and its control]. Leningrad, Medgiz, 1952.  
17 p.

50: Monthly List of Russian Accessions, Vol. 7, No. 3, June 1954.

RAZUMOV, Semen Abramovich; CHAKLIN, A.V., red.; SHEVCHENKO, F.Ya.,  
tekh.n.red.

[Work, rest, and fatigue] Trud, otdykh i utomlenie. Leningrad,  
Gos.izd-vo med.lit-ry Medgiz, Leningr.otd-nie, 1960. 111 p.

(WORK)

(REST)

(FATIGUE)

(MIRA 14:4)

RAZUMOV, V., entomolog; SINADSKIY, Yu., entomolog

Destroy gypsy moths! Nauka i pered. op. v sel'khoz. 8 no. 4:66-68  
Ap '58. (MIRA 11:5)

(Gypsy moth)

RAZUMOV, V. A., Cand Tech Sci -- (diss) "Research into a system of regulated electrical roller with frequency transformer." Moscow, 1960. 18 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Order of Lenin Power Inst); 250 copies; price not given; (KL, 23-60, 125)

CHIRIKOVA, V.A.; KUDRYAVTSEV, V.L.; AYDAROV, T.K.; Primeneniye  
LUKINA, V.A.; MUSTAZIN, F.Z.; DOKPARINA, N.O.

Determination of lead in air and in biological materials. Zav.  
lab. 30 no.9:1095-1096 '64. (MIRA 18:3)

RAJMAN, V.A.; UTRINA, T.P.; AYDAROV, T.K.

Atomic-absorption determination of lead in biological fluids.  
Zhur. anal. khim. 20 no.12:1371-1372 '65. (MIRA 18:12)

1. Gosudarstvennyy opticheskiy institut imeni S.I. Vavilova,  
Leningrad. Submitted December 25, 1964.



RAZUMOV, V.A., kand. tekhn. nauk (Yaroslavl')

Choice of the power rating of motors operating in a system  
consisting of regulated electrical shaft and frequency converter.  
Elektrichestvo no.6:32-37 Je '63. (MIRA 16:7)

(Electric driving)

RAGUNOV, V.A.; AYDAROV, T.K.; Prinimali uchastiye: MURTAZIN, E.S.;  
LEKINA, V.A.; GELAYEVA, F.R.

Tetrahydroxy-p-benzoquinone as a selective reagent for lead.  
Zhur. anal. Khim. 19 no.6:746-748 '64. (MIRA 18:3)

RAZUMOV, Vladimir Alekseyevich, assistant.

Selecting the power for motors in an adjustable servo system.

Nauch. dokl. vys. shkoly; elektromekh. i avtom no.2:187-195  
'58. (MIRA 12:1)

1. Kafedra energetiki Yaroslavskogo tekhnologicheskogo instituta.  
(Servomechanisms)

8 (2)  
AUTHOR: Razumov, Vladimir Alekseyevich, SOV/161-58-4-17/28  
Assistant

TITLE: On the Transition Processes in the System of the Electrical Drive-shaft (O perekhodnykh protsessakh v sisteme rabocheho elektricheskogo vala)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Elektromekhanika i avtomatika, 1958, Nr 4, pp 130-137 (USSR)

ABSTRACT: The course of the transition processes is very characteristic for the quality of electrical drive-shafts. Transition processes in an asynchronous frequency transformer are investigated here (Fig 1). Here are investigated: The magnitude of the diversion angle  $\gamma$  of the machine rotors and its changes in the course of the transition processes during starting, braking, impacts, and relieving.  $\gamma$  is inter-connected, via the number of pole-pairs in the machine, with the error-adaption angle  $\theta$  between the electromotive forces of the rotor. The electromagnetic transition processes are not considered. It is assumed that during the passage of the rotor current no energy losses and no voltage drop occur. The simplest system of two machines is examined. The equations (3)

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On the Transition Processes in the System of the  
Electrical Drive-shaft

SOV/161-58-4-17/28

for the electromagnetic processes of the frequency transformers and the motor 1 are given. The linear differential equation of the third order, presented in equation (8), corresponds to this equation system. The complete solution is given with equation (9). For the purpose of examining this equation, the transition processes of the drive motor during impact and relieving were recorded on an oscillograph at an experimental installation. The curves for the transition processes obtained by experiment and by computing in accordance with equation (9) are shown in figures 3 and 4. It can be seen from them that the amplitudes of the fluctuation of the actual error adaption angle are somewhat smaller than those obtained by computing. The reason for this is that the eddy currents in the steel were not considered. The fading-away time of the transition processes is in reality somewhat greater than that obtained by computation, owing to non-consideration of the losses. The actual values for the characteristic frequency of the oscillations of the system are in line with those obtained by computation. The damping of the oscillations in the system of the electric drive-shaft

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On the Transition Processes in the System of the  
Electrical Drive-shaft

SOV/161-58-4-17/28

mainly depends on the parameters of the driving motor of the frequency transformer, and to a lesser degree on the influence of eddy currents. The length of the transition processes is reduced with the increase of the damping action of the drive motor, that is with the reduction of the time constant of the motor. The time constant depends considerably on the stiffness of the motor. A reduction of the stiffness leads to a longer duration of the processes and to a change of the amplitude of the fluctuations of the angle  $\theta$ . The characteristic frequency of the oscillation of the system is not altered thereby. The curves for the transition processes during relieving, in accordance with equation (9), correspond well to those of the experiments. The character of the transition processes during starting and braking is in many respects also determined by the stiffness of the drive-motor. With a linear characteristic of the drive motor, the curves for the transition processes during starting and braking can be calculated in accordance with equation (9). The three possible cases are shown here. It is demonstrated (Figs 7 and 8) that the explanations given here are also valid

Card 3/4

On the Transition Processes in the System of the  
Electrical Drive-shaft

S07/161-58-4-17/28

for a system of an electrical drive-shaft with several motors.  
The publication of this article was recommended by the  
Kafedra elektrooborudovaniya prompredpriyatiy Moskovskogo  
energeticheskogo instituta (Chair for Electrical Equipment  
for Industrial Enterprises at the Moscow Institute of Power  
Engineering). There are 8 figures and 5 Soviet references.

ASSOCIATION: Kafedra energetiki Yaroslavskogo tekhnologicheskogo instituta  
(Chair of Power Engineering at the Yaroslavl' Technological  
Institute)

SUBMITTED: September 11, 1958

Card 4/4

CA 110

Production of tubers by the grafting method and properties of plants grown from them. V. L. Razumov, *Soviet Plant Ind. Record No. 3, 21, 30(1910); Agr. J. Trans. Kazan. No. 4(1915); Nos. 1, 5, 6(1919)*. Certain wild varieties of potato tubers have a higher ratio of sucrose to hexose and a higher N content than has cultivated potato. By grafting the wild on the cultivated potato it was possible to produce tubers morphologically identical with ordinary potatoes, but chemically equivalent or superior to the wild varieties. These results indicate that grafting produces a deep complex chem. transformation within the cell, which produces different conditions for synthesis of needed substances. Immunity to disease and various physiol. characteristics also were influenced by the grafting method. C. S. Shapiro

ASAC 55A MEDICAL LITERATURE CLASSIFICATION



RAZUMOV, V. I.

"The Vernalization of Winter Grass During Minus Temperatures," Dok. AN, 60, No. 4, 1948; All-Union Inst. of Plant Culture, Acad. Agr. Sci. im. V. I. Lenin, 1948-.

RAZUMOV, V.I.; SMIRNOVA, M.I.

~~RAZUMOV, V.I.; SMIRNOVA, M.I.~~  
Role of diurnal temperature variations in the process of vernali-  
zation. Dokl. AN SSSR 60 no.5:917-919 My '48. (MLRA 10:8)

1. Vsesoyuznyy institut rasteniyevodstva. Predstavleno akademikom  
N.A. Maksimovym.

(Vernalization)

RAZUMOV, DOCENT, V.

USSR/Agriculture - Heredity, Mechanism  
Hybridization

Jul 49

"Review of I. Ye Glushchenko's, 'Vegetative Hybridization of Plants,'" Prof N. Turbin,  
Docent . Razumov, 1 p

"Nauka i Zhizn" No 7

Prof Glushchenko is a disciple and collaborator of Lysenko. Book is a survey of domestic and foreign literature on this subject of great value for research workers, teachers and students, and a clear statement of Glushchenko's experimental data. It shows the advance made by Soviet biologists in the study of heredity which is evidenced by the indisputable facts of vegetative hybridization.

PA 1/50T4

RAZUMOV, V. I.

"Academician T. D. Lysenko and His Studies on Stages in Plant Development," Priroda, No. 3,  
1949;